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PATENT SPECIFICATION

Convention Date (Holland): Dec. 30, 1936.
Application Date (in United Kingdom) : Dec. 8, 1937.
Complete Specification Accepted : June 7, 1939.

506,929
No. 33982/37.

COMPLETE SPECIFICATION

Manufacture of Masses containing an Absorbent for a Liquid or Liquefied Constituent of the Mass

We, NAAMLOOZE VENNOOTSCHAP: W. A. SCHOLTEN'S AARDAPPELMEELFABRIEKEN, a Dutch Limited Liability Company, of Zuidbroek, The Netherlands, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

In the manufacture of potato flour, when washing out the starch from the grated or ground potato mass, a residue is obtained which contains the cellulose fibres present in the potatoes and also some starch. The proportion of starch varies between wide limits and is dependent on the care with which the potatoes are treated. If the starch is washed out incompletely, the fibres will contain a relatively large amount of starch; such a product is adapted to be used as cattle food. It is obvious, however, that in this case the manufacture of potato flour will be less economical, since a part of the starch is sold in the form of a product of low value. In a well managed plant the proportion of starch is reduced to a value below that which the product should have for application as a remunerative cattle food. The value of such a wase product will therefore be very small.

A known use for potato fibres containing starch is for manufacturing various articles of use. To this end the fibres are treated, with or without application of heat, with an alkali or an acid or the like, in order to gelatinize or to dextrinize the starch. The starch or dextrin obtained in this way serves as a binding agent and it is therefore possible to mould the mass treated in this manner. Until now this application has not come into practice, chiefly because in well managed plants a waste product is obtained, which contains only a small percentage of starch, and is therefore not well suited for the said application.

The present invention is based on the observation that the powdered product, which is obtained by washing the fibrous material until it contains 15 per cent. or less of starch based on the weight of the dry material, drying, comminuting and if desired sieving the material, may be used as a substitute for expensive absorbent materials in masses containing an absorbent for a liquid or liquefied constituent of the mass. Thus the powdered product in question is suitable as an absorbent filler and may be used as a substitute for cork meal in the linoleum industry and for wood meal and the like in the synthetic resin industry. By its high absorptive power for aqueous and non-aqueous liquids it is also suitable as a carrier for liquids, for example in the manufacture of explosives as a substitute for diatomaceous earth as an absorbent for nitroglycerol.

By varying the degree of comminution and sieving of the fibres, materials of various apparent specific gravities can be obtained, which is of importance for some applications, for instance in the manufacture of linoleum.

The fibres may be used for the above mentioned purposes without any chemical treatment of the product, since the application for the said purposes does not depend on the formation of substantial quantities of a binding agent by the gelatinization of the starch present.

By the invention claimed the important advantage is obtained that a waste product which at present is practically valueless may be used for various purposes.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. A manufacture of masses containing an absorbent for a liquid or liquefied constituent of the mass, wherein there is used as the absorbent a fibrous material obtained by washing potatoes until the remaining fibres contain 15 per cent. or less of starch and then drying and comminuting the fibrous material.

2. A manufacture of linoleum, wherein there is used as an absorbent filler a fibrous material as defined in Claim 1.

3. A manufacture of synthetic resin materials containing an absorbent filler, wherein there is used as filler a fibrous material as defined in Claim 1.

[*Price* 1/-]

4. A manufacture of explosives comprising an absorbent carrier containing a liquid explosive substance, wherein there is used as the absorbent carrier, a fibrous material as defined in Claim 1.

5. Products which have been made by the manufacture claimed in any of the preceding Claims.

Dated this 8th day of December, 1937.
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Leamington Spa: Printed for His Majesty's Stationery Office, by the Courier Press.—1939.